

> PRIVA BLUE ID S-LINE DOR4M/DOR8M

Relay output module with manual override



An Priva Blue ID S-Line DOR4m Relay output module with manual override or Priva Blue ID S-Line DOR8m Relay output module with manual override controls output functions using a relay. The module has override buttons for manual intervention.

Characteristics

- 4 or 8 digital outputs
- switching extra-low voltage and low voltage possible
- switching current 3 A maximum with Ohmic load
- the relay common contact has two spring terminals, switching voltage can easily be looped-through from output to output
- hot swappable
- 24 V system power supply monitoring
- LEDs for indication of manual override
- LED per output, colour is adjustable
- LED for status of module
- Priva Blue ID Lifeline
- three override buttons per output to manually intervene
- text card for identification of outputs

Manual override

The module has override buttons for manual intervention and corresponding LEDs per output. If necessary, they can be used to control the connected device manually. The corresponding LED indicates this.

Controlled switching

If communication with the controller fails, the outputs are set to a user-configured state.

Modular solution

An optimal fit is always possible because the module is available with a choice of 4 or 8 outputs.

Electrically isolated make or break contacts

The contacts on the terminals are isolated from the rest of the system.

Modular design

Module and base form a unique combination. As a result of this, a module cannot be incorrectly positioned in a base. You simply click the base with module onto the DIN rail.

The wiring easily connects to the base via spring terminals. The base remains in place when replacing the module, removing the need to rewire.

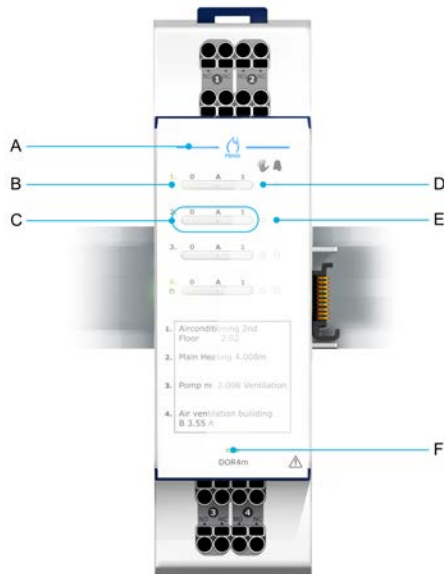
Hot swappable

Removing a module from the base and replacing it can easily be done without tools. This can be done live (hot swappable). When doing so, the status selected with the manual override buttons is retained. The relay outputs switch themselves off when the module is removed. However, the load on the break contacts (NC contacts) has to be switched off externally first, before you remove or insert the module.

Wiring

You do not need to disconnect wiring when exchanging modules. This is because the wiring is connected to the module's base.

Clear indication and operation



Legend

A	Priva Blue ID Lifeline
B	LEDs for status of outputs
C	0 and 1: manual control of connected devices A: automatic control of connected devices
D	LED for status of control: • LED on: manual control • LED off: automatic control
E	alarm LED
F	LED for status of module

Priva Blue ID Lifeline

The modules are equipped with blue LEDs. Together, these LEDs form the Priva Blue ID Lifeline. If the blue line is continuously on, the modules and bases are in the correct place according to the configuration in TC Engineer.

LEDs for status of outputs

Per output, an LED clearly indicates the status of the output. Depending on the configuration, the LED is green, red or off.

The LED can also be configured as an operating message for the connected device. The actual operating mode is compared with the sent operating mode via a digital input. The LED flashes if there is a difference between these two modes. If they are the same, the LED follows the control.

Alarm LED

An alarm LED is present for each output. This LED can be used to show the failure message from a device connected to a digital input.

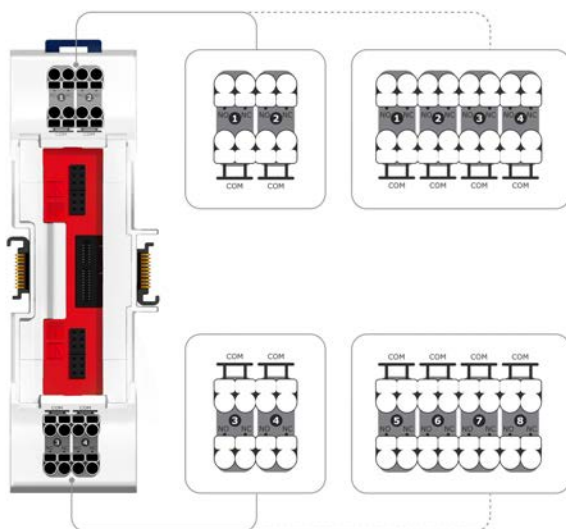
LED for status of module

The LED shows the status of the module. The LED is on continuously when the module is working correctly. If not, the LED flashes or the LED is off.

LED details

Details about statuses and indications of modules, input and/or outputs and the related LED colours and flashing patterns, are described in the *LEDs and Priva Blue ID Lifeline* appendix of the *Installing and commissioning* manual.

Connections



Legend

COM	common contact, dual design for loop through
NO (normally open)	make contact, open when output is not powered
NC (normally closed)	break contact, closed when output is not powered

DORm module specifications

General		
Module article description	Priva Blue ID S-Line DOR4m Relay output module with manual override	Priva Blue ID S-Line DOR8m Relay output module with manual override
Module article number	5071002 (V05:01 and higher)	5071004 (V04:01 and higher)
Base article description	Priva Blue ID S-Line DOR4 Relay output base	Priva Blue ID S-Line DOR8 Relay output base
Base article number	5071101 (V01:00 and higher)	5071103 (V01:00 and higher)
Number of outputs	4	8
Dimensions (XYZ) ¹	161.5 x 46 x 102.4 mm (6.36 x 1.81 x 4.03 inches)	161.5 x 61 x 102.4 mm (6.36 x 2.40 x 4.03 inches)
Weight	module: 150 grams base: 130 grams	module: 220 grams base: 160 grams
Maximum power consumption	2.6 W	3.2 W
Typical power dissipation ²	1.7 W	2.0 W
MTBF ³	module: 790,000 hours base: 8,760,000 hours	module: 540,000 hours base: 8,760,000 hours
Construction	removable module on a base	
Mounting of base	clicks onto DIN rail	
Housing material	mixture of polycarbonate and ABS	
Button material	TPE (synthetic rubber)	
Connector type	terminal block	
Permitted core cross section area	solid: 0.2 ... 4 mm ² flexible: ... 2.5 mm ² flexible with ferrule connector: 0.25 ... 1.5 mm ²	
Identification of connections	labelling with an explanatory abbreviation	

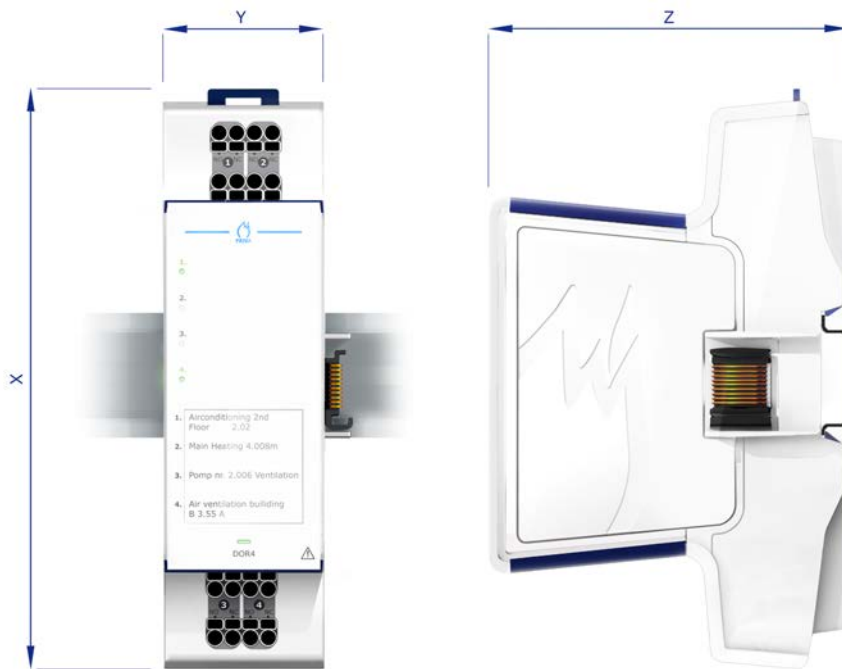
¹ Excluding 1.1 mm room between the modules

² Dissipation under the following conditions:

- I/O load of 50%
- Energy saving mode on (LEDs off)

³ The MTBF is calculated according to the *Telcordia SR-332 standard Issue 2* under the following conditions:

- ambient temperature: 35 ... 50 °C
- supply voltage: 24 VDC
- time in operation per day: 24 hours
- reliability level: 60 %






Digital relay outputs	
Output configuration	change-over contact
Maximum switching voltage	250 VAC 30 VDC
Maximum switching voltage USA/Canada when switching different mains phases at the same module	125 VAC
Maximum switching current	3 A ($\cos\phi = 1$)
External fuse	maximum 16 AT
Expected service life of relay contact with $\cos\phi = 1$	up to 250 VAC and 3 A: 300,000 cycles 24 VDC and 3 A: 300,000 cycles
Expected service life of relay contact with $\cos\phi \neq 1$	250 VAC and 2 A AC15: 200,000 cycles 250 VAC motor 370 W AC3: 300,000 cycles 24 VDC and 3 A L/R 7 ms: 200,000 cycles 24 VDC and 1 A DC13: 100,000 cycles
UL certified service life of relay contacts with $\cos\phi = 1$ and maximum of 6 switches per minute	up to 250 VAC and 3 A: 30,000 cycles 24 VDC and 3 A: 30,000 cycles
UL certified service life of relay contacts with $\cos\phi \neq 1$ and maximum of 6 switches per minute	240 VAC and 0.5 hp motor: 1,000 cycles 120 VAC and 0.25 hp motor: 1,000 cycles B300 pilot duty rating: 6,000 cycles
Maximum switching frequency	6 times per min.
Fail-safe	if communication with the controller fails, the outputs are set to a user-configured state
Indication	<ul style="list-style-type: none"> Priva Blue ID Lifeline green-red LEDs for status of outputs (colour is adjustable) orange LED for status of control (automatic or manual) red alarm LED green LED for status of module
Operation	buttons for manual operation to control connected equipment: <ul style="list-style-type: none"> left: relay off, NC and COM connected middle: automatic or manual control right: relay on, NO and COM connected

General specifications of controllers, modules and bases

Housing	
IP code	IP30 (IEC 60529)
Flammability class	V-0 (UL 94)
Recycle code	7
Colour	release surfaces of module and DIN rail release: blue (RAL5013) other parts: white (RAL9003)
Device type	open device, for use in a pollution degree 2 environment

Installation and connection	
Installation	<p>in control panel:</p> <ul style="list-style-type: none"> • accessible to authorized personnel only • can be clicked onto the DIN rail that is positioned horizontally or vertically on the mounting plate <p>Note: The controller, SC module and SN module may only be mounted horizontally.</p> <p>in panel door integration in control panel:</p> <ul style="list-style-type: none"> • accessible to authorized personnel only • can be clicked onto the DIN rail that is positioned horizontally on the mounting plate
DIN-rail type	35 x 7.5 mm (height x depth), in accordance with IEC 60715
Maximum width of I/O modules, bus extension modules and controller	20 m

Environment	
Permitted temperature inside control cabinet during normal operation with horizontally mounted modules only (without airflow)	0 ... 50 °C
Permitted temperature inside control cabinet during normal operation with vertically mounted modules only (without airflow)	0 ... 35 °C
Permitted temperature during transport and storage	-20 ... 70 °C
Permitted relative ambient humidity	10 % ... 95 % (non-condensing)
Shock and vibration resistance	IEC 61131-2
Installation category	II

Legislation and standards	
Canada / USA	 <ul style="list-style-type: none"> • UL 508:2005 (industrial control equipment) • UL 916:2007 (energy management equipment) • UL 61010-1:2004 (measurement and control equipment) • CSA C22.2 No 14-10: 2011 (industrial control equipment) • CSA C22.2 No 205-12: 2012 (signal equipment) • CSA C22.2 No 61010-1-04 (measurement and control equipment)
	EMC <ul style="list-style-type: none"> • complies with 47 CFR Part 15 Subpart B, Class B (FCC Rules) Operation is subject to the following two conditions: <ol style="list-style-type: none"> 1. This system may not cause harmful interference. 2. This system must accept any interference received, including interference that may cause undesired operation. • ISM-system, complies with Canadian ICES-001
Europe	 <ul style="list-style-type: none"> • Low voltage directive 2006/95/CE: <ul style="list-style-type: none"> • EN 61010-1:2010 (measurement and control equipment) • EMC directive 2004/108/EC: <ul style="list-style-type: none"> • EN 61326-1:2006 (measurement and control equipment) • EN 61000-6-2:2005 (generic immunity standard) • EN 61000-6-3:2007 (generic emission standard) • RoHS directive 2011/65/EU
	 <p>complies with the WEEE directive 2002/96/EC</p>

Legislation and standards

International



- The Priva Blue ID S-Line S10 Controller is BTL registered at BACnet International.
- The Priva Blue ID S-Line S10 Controller is BACnet certified in accordance with ISO 16484-5/6.
- Priva is a member of the BACnet Interest Group Europe.

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